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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,368	06/09/2006	Jens Fiedler	78857.105095	5736

86528 7590 10/29/2010

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EXAMINER	
MAWARI, REDHWAN K	
ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
10/29/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

AustinUSPTO@kslaw.com
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Office Action Summary	Application No.	Applicant(s)	
	10/596,368	FIEDLER ET AL.	
	Examiner	Art Unit	
	REDHWAN MAWARI	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 September 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 4-6, 9-11 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otterbein (5,563,789) in view of Keuper (6,085,133).

Consider claim 1, Otterbein discloses An arrangement for determining a relative vertical movement of a vehicle chassis and relative to a vehicle body of a wheeled vehicle, said vehicle body being movably connected to the chassis (see at least abstract), comprising:

a measuring entity arranged in the wheeled vehicle, wherein the measuring entity is configured to measure three respectively perpendicular linear accelerations of the wheeled vehicle and at least two rotational speeds (see at least col. 3, lines 48-57, col. 5, lines 40-49),

even though Otterbein teaches velocities of the vehicle body as well as the accerlertion sensors; however examiner introduced a secondary reference for more clarification.

Keuper teaches wherein the measuring entity is configured to measure three respectively perpendicular linear accelerations of the wheeled vehicle and at least two rotational speeds (see at least FIG. 2);

Keuper teaches each relating to a rotational movement or a component of a rotational movement about a coordinate axis of the wheeled vehicle, wherein the at least two coordinate axes run perpendicularly to each other (see at least FIG. 2), and

an analysis entity which is combined with the measuring entity and is operable to determine a momentary vertical distance between the vehicle body relative to the vehicle chassis using the three linear accelerations and the at least two rotational speeds, and without using any height-level or suspension travel measurements as input for determining the momentary vertical distance (see at least col. 3, lines 48-57, col. 5, lines 40-49), furthermore see at least Keuper (at least (abstract and FIG. 2);

wherein the analysis entity comprises a calculating unit which is operable to calculate a plurality of the momentary vertical distances using the at least two rotational speeds and the three linear accelerations (see at least col. 3, lines 48-57, col. 5, lines 40-49), furthermore see at least Keuper (at least (abstract and FIG. 2).

Accordingly, it would have been obvious to an ordinary skilled person in the art at the time of the invention to combine the invention of Keuper into the invention of Otterbein for the purpose of better controlling and regulating suspension by capturing the momentarily existing state of travel of the vehicle as exactly as possible.

Consider claim 4, Keuper teaches wherein the measuring entity is configured such that the at least two coordinate axes run perpendicularly to each other as a pair in each case (see at least FIG. 2).

Consider claim 5, Otterbein discloses wherein the analysis entity includes a calculating unit which is configured to calculate the momentary vertical distance between the vehicle body relative to the vehicle body with reference to a spring suspension, in particular a spring suspension which is moderated, between at least one of the wheels of the wheeled vehicle and the vehicle body (see at least FIG. 2).

Consider claim 6, claim 6 is rejected using the same art and rationale used to reject claim 1.

Consider claim 9, claim 9 is rejected using the same art and rationale used to reject claim 4.

Consider claim 10, claim 10 is rejected using the same art and rationale used to reject claim 5.

Consider claim 11, claim 11 is rejected using the same art and rationale used to reject claim 1.

Consider claim 15, claim 15 is rejected using the same art and rationale used to reject claim 4.

Consider claim 16, claim 16 is rejected using the same art and rationale used to reject claim 5.

Claims 2-3, 7-8, 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otterbein (5,563,789) in view of Keuper (6,085,133) and further in view of Schiffmann (6,292,759).

Consider claim 2, Otterbein in view of Keuper do not explicitly disclose wherein the measuring entity has acceleration sensor for measuring the linear accelerations and rotations speed sensors for measuring rotational speeds, and wherein the acceleration sensors and the rotational speed sensors are parts of a prepared hardware unit which is configured for installation in the wheeled vehicle;

Schiffmann teaches wherein the measuring entity has acceleration sensor for measuring the linear accelerations and rotations speed sensors for measuring

rotational speeds, and wherein the acceleration sensors and the rotational speed sensors are parts of a prepared hardware unit which is configured for installation in the wheeled vehicle (see at least FIG. 1).

Accordingly, it would have been obvious to an ordinary skilled person in the art at the time of the invention to combine the invention of Schiffmann into the invention of Otterbein in view of Keuper for the purpose of providing an estimation of the attitude angle of a vehicle and minimizes errors that may be present in automotive grade sensors.

Consider claim 3, Schiffmann teaches an arrangement according to claim 1, wherein the measuring entity is configured such that the three linear accelerations are measurable as measured variables which are linearly independent of each other (see at least FIG. 3A).

Consider claim 7, claim 7 is rejected using the same art and rationale used to reject claim 2.

Consider claim 8, claim 9 is rejected using the same art and rationale used to reject claim 3.

Consider claim 12, claim 12 is rejected using the same art and rationale used to reject claim 2.

Consider claim 13, claim 13 is rejected using the same art and rationale used to reject claim 2.

Consider claim 14, claim 14 is rejected using the same art and rationale used to reject claim 3.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Redhwan Mawari whose telephone number is 571 270 1535. The examiner can normally be reached on 7:30 AM - 5PM Mon-Fri Eastern Alt Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571 272 6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/09/2010

/R. M./

Examiner, Art Unit 3663

/Tuan C To/

Primary Examiner

October 25, 2010